

WET CLEAN COMPOSITIONS FOR CoWP AND POROUS DIELECTRICS

ABSTRACT OF THE DISCLOSURE

The present invention is a formulation for wet clean removal of post etch and ash residue from a semiconductor substrate having a CoWP feature, comprising;

5 Deionized water;

 Organic acid;

 Amine and/or quaternary ammonium hydroxide;

 wherein the formulation is compatible with the CoWP feature and either (a) the molar
10 ratio of amine and/or quaternary ammonium hydroxide to organic acid provides a pH in
 the range of 7-14; or (b) the formulation includes a corrosion inhibitor.

 A method of using the formulation is also described.

Figure 1